

# Event Study under Disturbed Estimation Period

by

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## Abstract

Since the formalized approach adopted by Fama, Fisher, Jensen and Roll (1969), event studies have become an important reference tool for empirical research in Finance. The original methodology has been improved in order to tackle numerous problems such event-date uncertainty, event clustering, event-induced variance phenomenon... Somewhat surprisingly, the determination of the estimation period has attracted less interest. It remains most frequently routinely determined as a fixed window prior to the event announcement day, during which it is supposed that no other significant events have happened. In practice, in large sample studies, validation of this assumption on a case-by-case basis is out of reach, despite the fact that it is known to be violated for some specific corporate events. The case of merger and acquisitions, in particular the behavior of bidders who make repetitive acquisitions (and acquisition attempts), is a typical example. We propose in this work an adaptation of the basic methodology by explicitly taking into account the likely existence of firm-specific events during the estimation period. We first carry out a standard specification and power analysis, following the Brown and Warner (1980, 1985) scheme. We then show that the proposed method significantly changes the inferences using a sample of around 580 merger and acquisition operations concerning the bidders' abnormal returns.

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